



FIG. 1

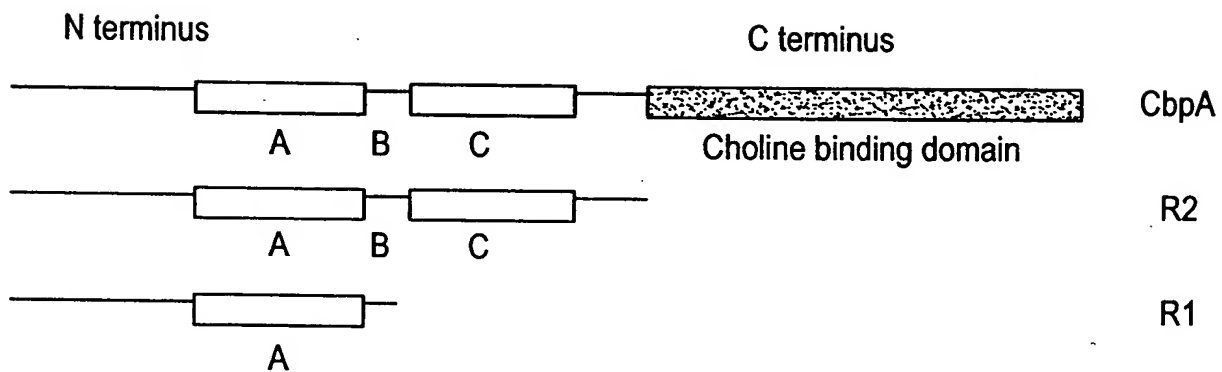




FIG. 2A-1

	10	20	30	40	50	60	70
-AVASLVMSGVVHATENEVTTOVATSSNRANESQTEHRKAQKQ-							
SPB328 (23F) Cbpa -AVASLVMSGVVHATEKEVTTOVATSSNKANKSQTEHMKAAQKQ-							
SPB365 (23F) Cbpa -AVASLVMSGVVHATEKEVTTOVATSSNRANKSQTEHMKAAQKQ-							
SPB105 (68) Cbpa VAVASLVMSGVVHATEKEVTTOVATSSNRANESQAGHRKAAEQF-							
SPSJ12 (19A) Cbpa -AVASLVMSGVVHATENEGTQAPTSSNRGNESQAEHMKAAQKQ-							
SPB331 (14) Cbpa --VASLVMSGVVHATEKEVTTOVATSSNKANKSQTEHMKAAQKQ-							
SPR332 (9V) Cbpa CTVASLVMSGVVHATENERTTOVPTSSNRGK--PERRKAAEQF-							
ATCC2 Cbpa trunc VAVASLVMSGVVHATEKEVTTOVPTYSNMAK--TEHRKAAQKV-							
R6X (2) Cbpa trunc --ENEGSTQAAATSSNMAK--TEHRKAAQKV-							
SPSJ9 (14) Cbpa t Y-IASLVFLGGVVHAE---GVRSENNPTVTSSGQDLSKKYADE-							
ATCC6B Cbpa trunc ---ASLVFLGGVVHAE---GVRSGNNSTVTSSGQDLSKKYADE-							
Ntype4 Cbpa trunc CIVASLVMSGVVHATENEGATQVPTSSNRANESQAEQEPKLDSEDRKARKEVEEYVKKIVGESYAKS							
ATCC4 Cbpa trunc -IVASLVMSGVVHATENEGATQVPTSSNRANESQAEQEPKLDSEDRKARKEVEEYVKKIVGESYAKS							

	80	90	100	110	120	130	140
DRRKHTONVALNTKLSAIKTEYLNGLSVLEEKSEAEPLPSEIKA--KLDAAFEQFKKOTL							
SPB328 (23F) Cbpa DRRKHTONVGLLTKLGVIKTEYLHGLSVSKKKSEAEPLPSEIKA--KLDAAFEQFKKOTL							
SPB365 (23F) Cbpa DRRKHTONVGLLTKLGVIKTEYLHGLSVSKKKSEAEPLPSEIKA--KLDAAFEQFKKOTL							
SPB105 (68) Cbpa DRRKHTONFALNIKLSRIKTEYLKRLNVLEEKSKAELPSETKK--EIDAAFEQFKKOTNR							
SPSJ12 (19A) Cbpa DRRKHTONVGLLTKLGAIKTEYLRLSVSKEKSTAEPLPSEIKE--KLTAAFKQFKKOTL							
SPB331 (14) Cbpa DRRKHTONVGLLTKLGVIKTEYLHGLSVSKKKSEAEPLPSEIKA--KLDAAFEQFKKOTL							
SPR332 (9V) Cbpa DRRKHTONLAFNIQLSRIKTEYLNGL---KEKSEAEPLPSIKA--ELDAAFKQFKKOTL							
ATCC2 Cbpa trunc DRRKHTONFANMKLSAIKTEYLNGL---EKSEAEPLPSIKA--KLDAAFEQFKKOTL							
R6X (2) Cbpa trunc DRRKHTONVALNIKLSAIKTKYLRELNVLEEKSKDELPSIKA--KLDAAFEQFKKOTL							
SPSJ9 (14) Cbpa t DRSKHITVNLINKLQDIKRTYLYELNVLEEDKSKAELPSIKA--ELDAAFKQFKKOTL							
ATCC6B Cbpa trunc KKVQHTONADFNKLSIKTKYLYELNVLEEKSEAEPLPSIKA--ELDAAFKQFKKOTL							
Ntype4 Cbpa trunc TKKRHTITVALVNLNLIKNEYN--KIVESTESQLQILMMESRSKVDEAVSKFEKODSSSSSSSSTK							
ATCC4 Cbpa trunc TKKRHTITVALVNLNLIKNEYN--KIVESTESQLQILMMESRSKVDEAVSKFEKODSSSSSSSSTK							



FIG. 2A-2

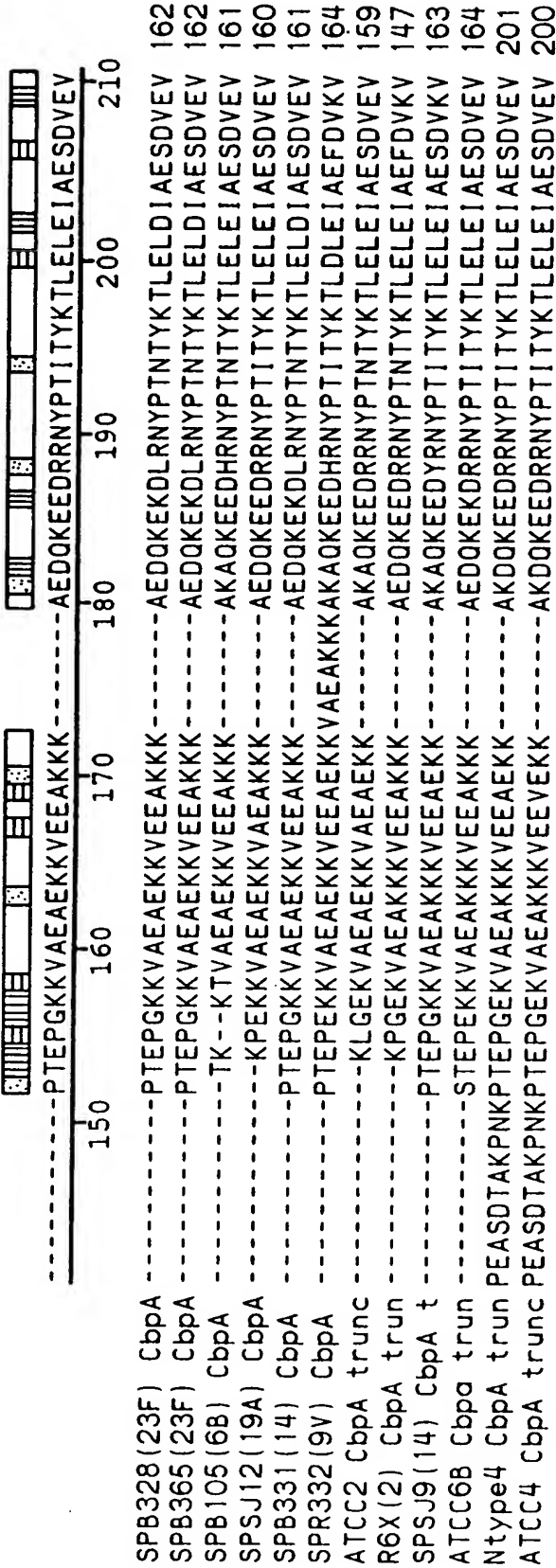




FIG. 2B-1

SPB328 (23F) CbpA KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 227
SPB365 (23F) CbpA KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 227
SPB105 (68) CbpA KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 227
SPSJ12 (19A) CbpA KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 227
SPB331 (14) CbpA KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 226
SPR332 (9V) CbpA KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 229
ATCC2 CbpA trunc KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 222
R6X (2) CbpA trunc KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 213
SPSJ9 (14) CbpA t KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 227
ATCC68 CbpA trunc KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 234
Ntype4 CbpA trunc KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 261
ATCC4 CbpA trunc KKAELVKEEAKESRDEKKINOAKAKVENKKAEATRLKNIKTREKAE--AKRRADAKLOEA---NVA 260

SPB328 (23F) CbpA TSEODKSKRRRAKREVXGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 297
SPB365 (23F) CbpA TSEODKSKRRRAKREVXGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 297
SPB105 (68) CbpA TSEODKPKGRRKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 300
SPSJ12 (19A) CbpA -S-SKRRKSRXKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 291
SPB331 (14) CbpA TSEODKSKRRRAKREVXGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 296
SPR332 (9V) CbpA -S-SKRRKSRXKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 295
ATCC2 CbpA trunc -S-SKRRKSRXKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 288
R6X (2) CbpA trunc TSDQKPKGRRKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 283
SPSJ9 (14) CbpA t -S-SKRRKSRXKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 293
ATCC68 CbpA trunc -S-SKRRKSRXKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 300
Ntype4 CbpA trunc -S-SKRRKSRXKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 328
ATCC4 CbpA trunc -S-SKRRKSRXKRGVPGELATPOKKENDAKSSDSSVGEETLTPSLKPEKKVAEAEKKVVEEAKKKAEDQK 327



FIG. 2B-2

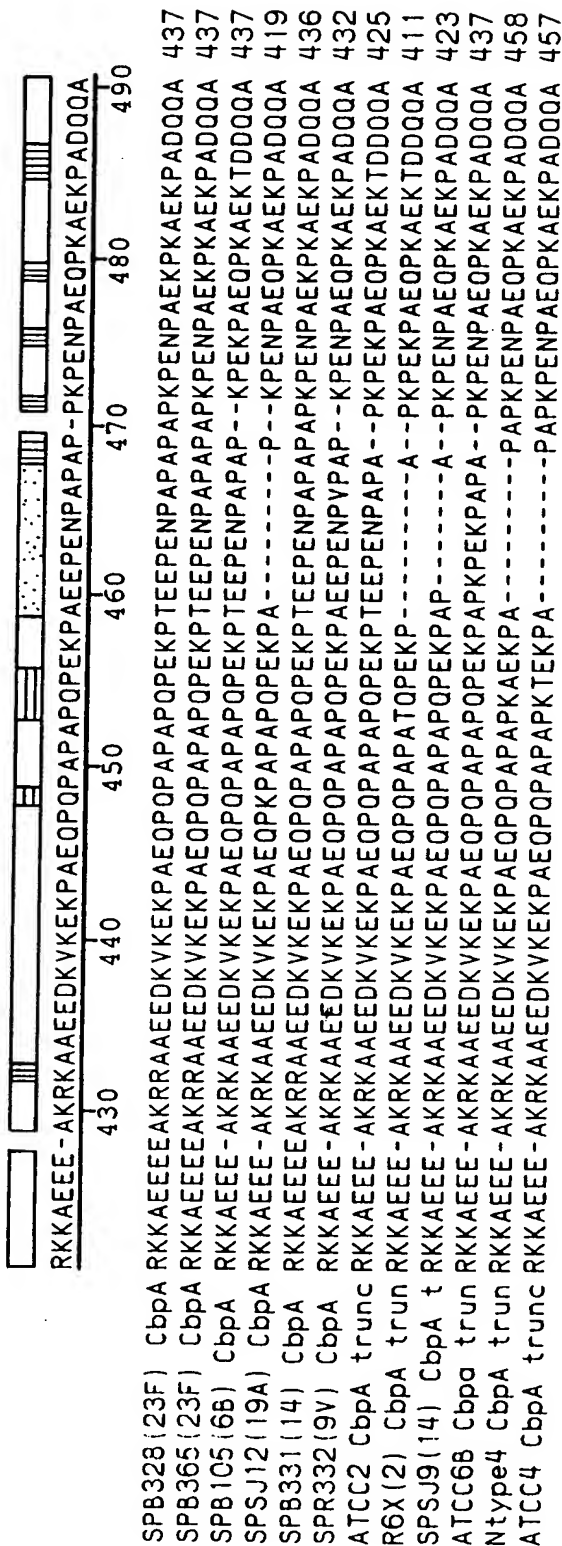
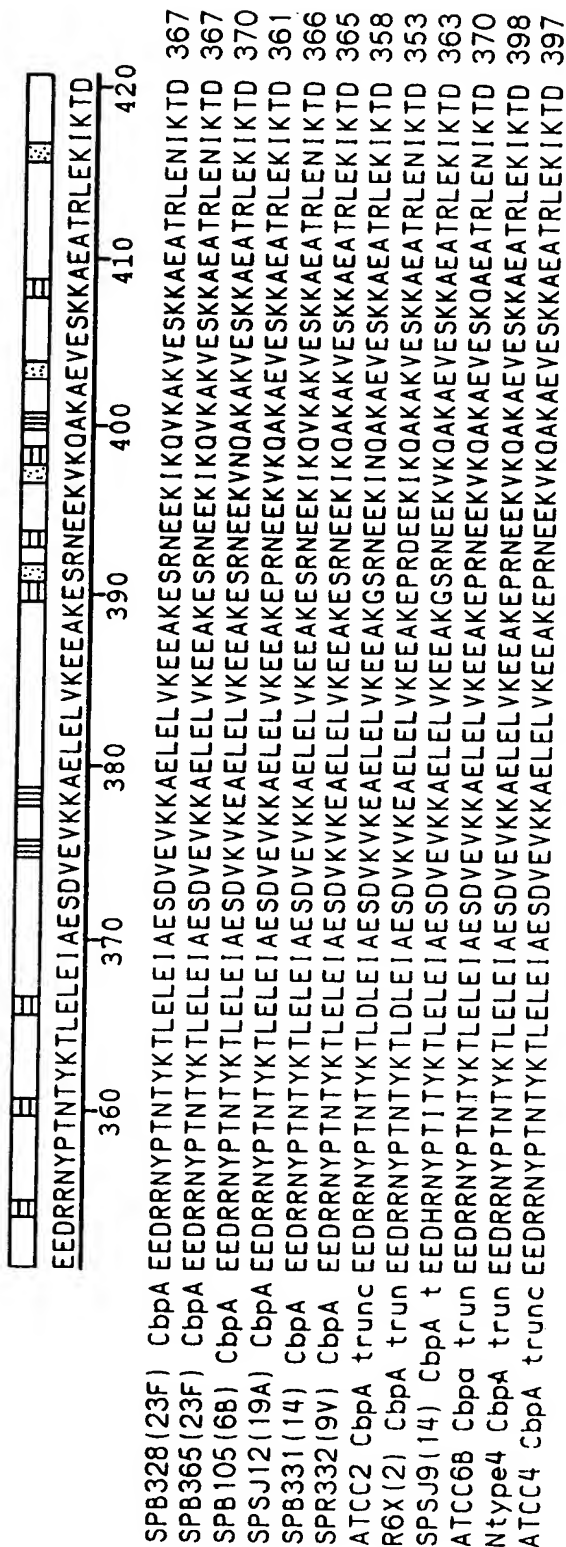




FIG. 2B-3

 EE

SPB328(23F) Cbpa EE
SPB365(23F) Cbpa
SPB105(68) Cbpa EE
SPSJ12(19A) Cbpa
SPB331(14) Cbpa E
SPR332(9V) Cbpa E
ATCC2 Cbpa trunc EE
R6X(2) Cbpa trunc EE
SPSJ9(14) Cbpa t EE
ATCC68 Cbpa trunc EE
Ntype4 Cbpa trunc EE
ATCC4 Cbpa trunc EE

439
437
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433
427
413
425
439
460
459



CBP Truncate 483:58

CBP Truncated-Truncate 483:57

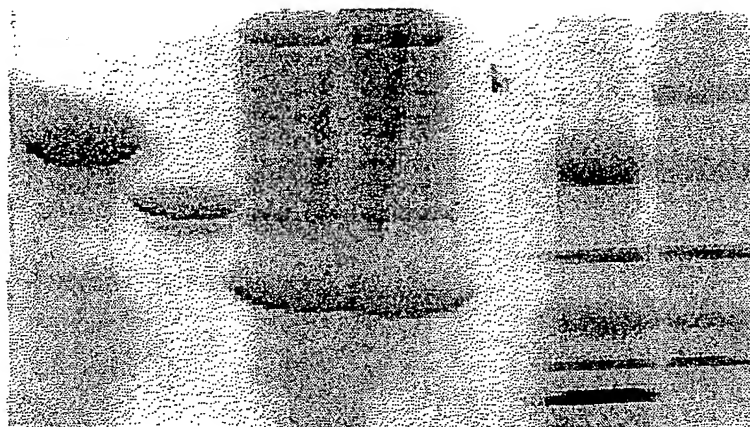


FIG. 3



FIG. 4

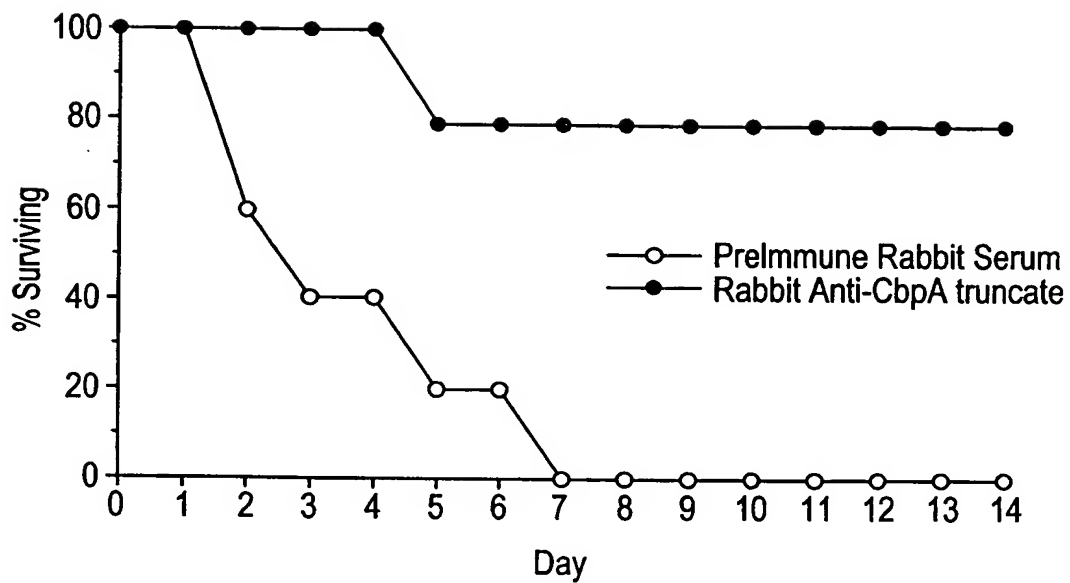




FIG. 5

Titration of anti-R2 antibody on R6x adhering to LNT-HSA coated plates

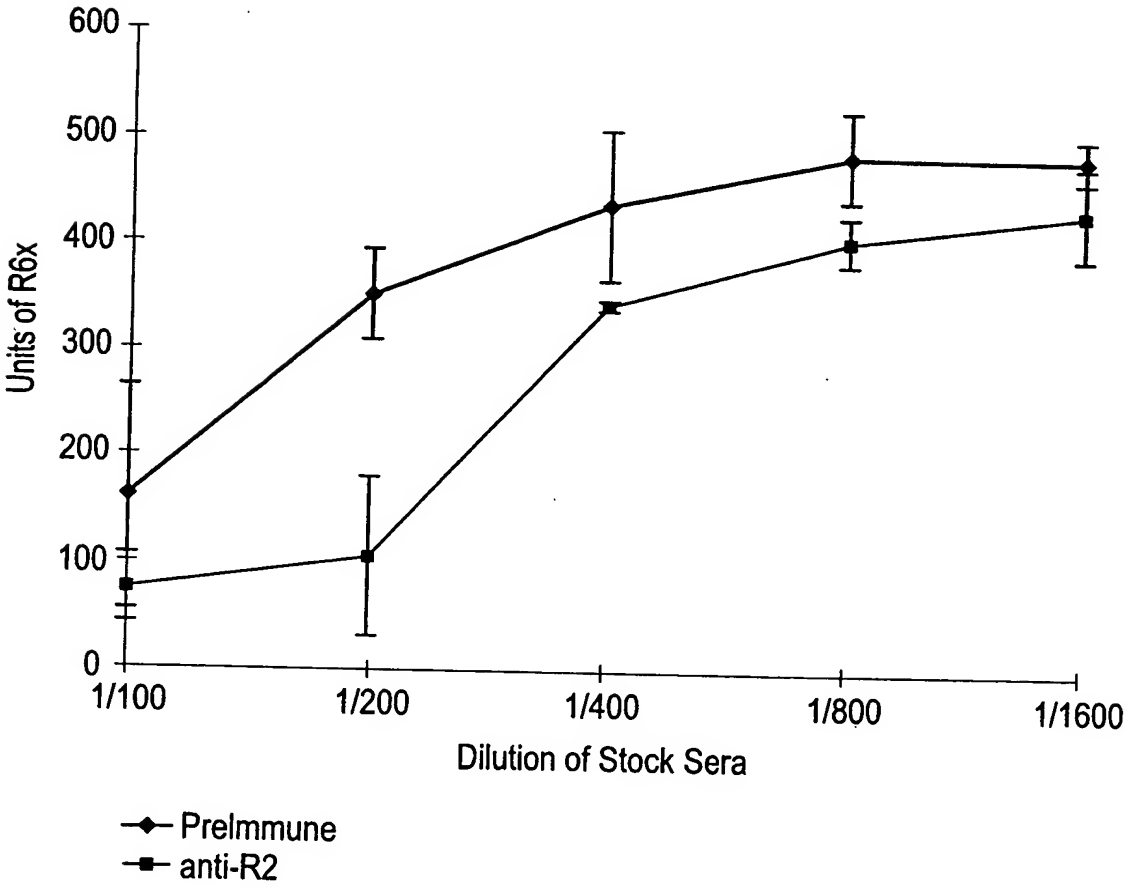




FIG. 6

T4R Pretreated with anti-CbpA Antibody Prior to
Adhesion to LNT-HSA Coated Plates

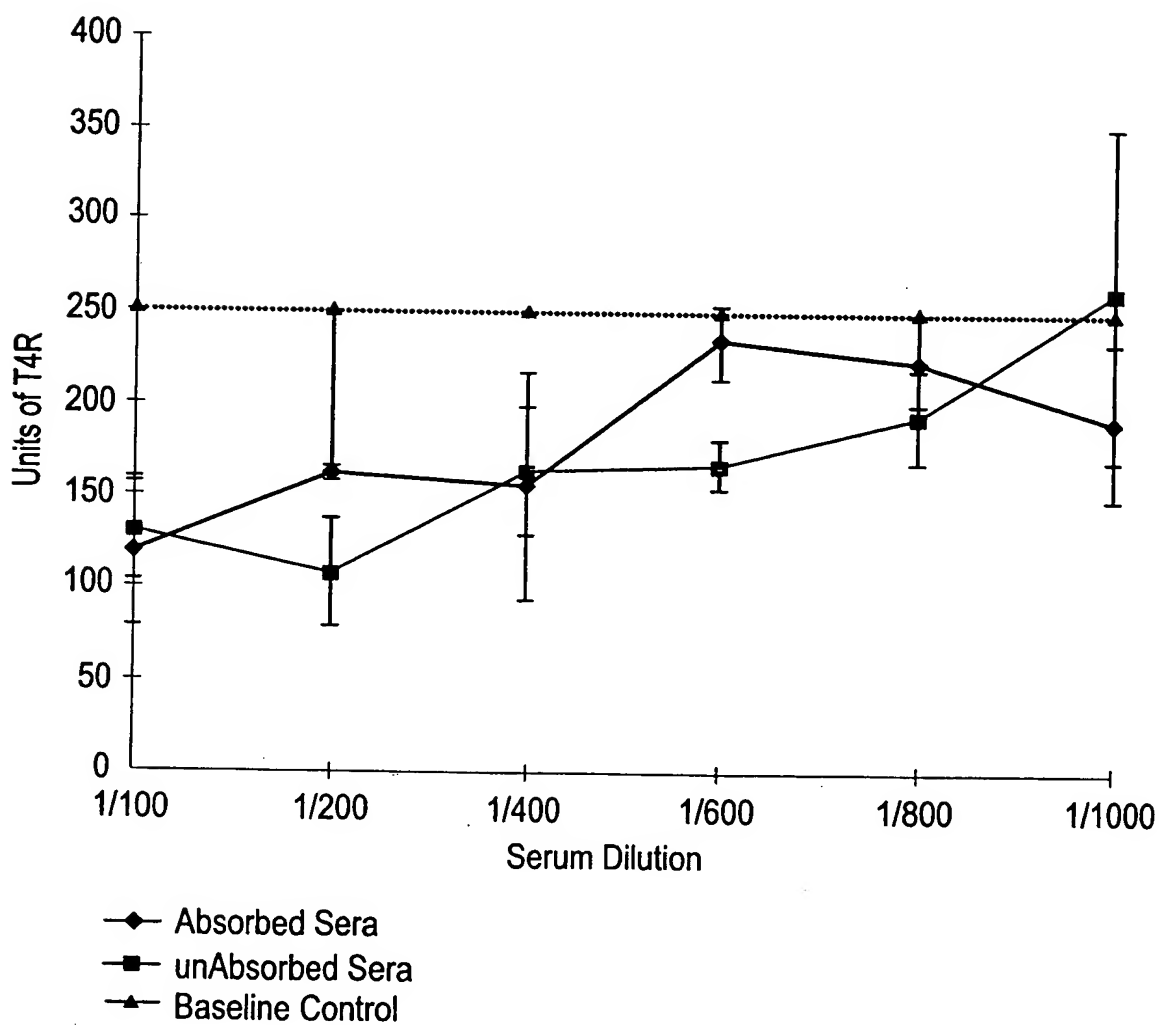
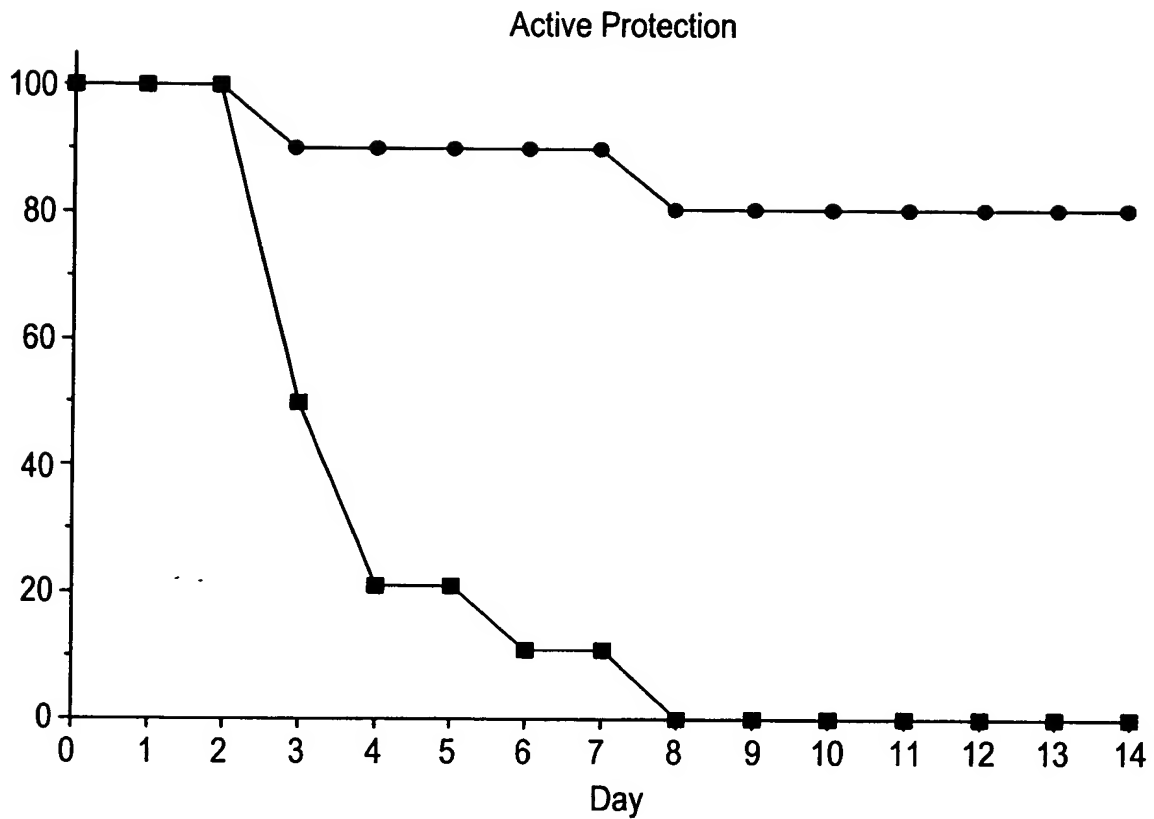




FIG. 7



EPT: 4,096,000

Challenge: 560 cfu serotype 6B

n=10

- Sham
- CbpA truncate NR1X